



## Case study – Turboden

# Certification to ISO 9001:2015 delivers compliance, assurance and performance to Turboden



### Client background

Founded in Italy in 1980, Turboden is a global leader in the design, manufacture and service of Organic Rankine Cycle (ORC) turbogenerators, and today has more than 334 plants in 35 countries. The company's turbogenerators convert waste into clean, usable energy using cutting-edge ORC technology. In 2013, Turboden became part of the Japanese engineering, electrical equipment, and electronics giant, Mitsubishi Heavy Industries.

### Turboden in numbers

Production facility in Italy: 2,300 m<sup>2</sup>  
Turbogenerators installed worldwide: 337  
Total kilowatt electric (kWel) generated: 503,055

### Standard certified by LRQA ISO 9001:2015



Turboden is a leading European company in the development and production of ORC (Organic Rankine Cycle) turbogenerators. The state-of-the-art ORC technology enables Turboden's turbogenerators to generate heat and power from renewable sources such as biomass, geothermal and solar energy, as well as waste heat recovery from industrial processes.

### ISO 9001:2015 revision a timely opportunity for reviewing existing management system

Growing environmental awareness over the effects of climate change and oil prices have contributed to an explosion in demand for efficient, clean and reliable methods of producing electricity, as is generated by Turboden's unique turbogenerators.

Having grown considerably in recent years, Turboden recognised the need to improve the organisation's performance and increase the efficiency at which they operate, over and above achieving compliance to satisfy a wider range of stakeholders.

Turboden had been planning to review their quality management system (QMS), and the revised international QMS standard, ISO 9001:2015, presented the company with a timely opportunity to do a deep-dive evaluation of their existing management system against the requirements of the latest version.

With the revised ISO 9001:2015 standard emphasising the importance of organisational context and introducing the concept of risk-based thinking, Turboden jumped at the chance to apply these new areas as part of their transition plan as soon as possible, in order to better identify and manage their risks and opportunities.

### Efficiency, risk management, and customer satisfaction through certification

As a result of the certification process, Turboden reorganised the company's internal processes. This helped them demonstrate more clearly, to an increasingly demanding customer base, how their manufacturing process results in improved performance and consistently high quality products.

Another positive outcome of certification was the creation of new tools, which Turboden now uses to conduct risk analysis and verify the true effectiveness of any actions implemented.

Turboden's Quality Assurance Engineer, Paolo Zonaro, said, "LRQA provided great support during our transition to ISO 9001:2015. With the competence of their trained auditors and the tools they provided, such as the Gap Analysis, we were able to plan and implement a smooth and effective migration to the revised standard."



### Certification as key to long-term success

Turboden had a clear objective of wanting a management system that not only aligned with the revised standard, but also retained and enhanced the dynamism and flexibility to which they credit their rapid growth in recent years.

After implementing the revised QMS, it was clear to them that this key objective had been achieved in terms of supporting their organisational growth and vitality.

### Working with LRQA

Turboden was certain that in order to enhance its visibility and credibility in the market, achieving certification was not sufficient. The company wanted to ensure they received assurance and recognition from an institution well-known worldwide for its competence, reliability, and impartiality.

To them, LRQA was the clear choice. The fact that parent company Mitsubishi Heavy Industries is certified by LRQA was also a strong vote of confidence.

Roberto Bini, Managing Director at Turboden, concluded, "From the very first certification audit through to the final assessment, LRQA's auditors were always professional and impartial, and fully understood, in an efficient way, our organisation in the context of the requirements of ISO 9001:2015."

### About Turboden

Turboden, a Mitsubishi Heavy Industries company, is an Italian company and a global leader in the design, manufacture, and after-sales of Organic Rankine Cycle (ORC) turbogenerators, which harness heat to generate electric and thermal power from renewable sources, including biomass, geothermal and solar

energy and waste heat from industrial processes, waste incinerators, engines or gas turbines. Turboden has more than 334 plants in 35 countries and offers turbogenerators from 200 kWe to 20 MWe.

### About LRQA

LRQA is a recognised, world leading professional assurance services organisation. We specialise in management systems compliance and expert advice across a broad spectrum of standards, schemes and business improvement services including customised training and assurance programmes. We are recognised by almost 50 accreditation bodies and deliver our services to clients in more than 120 countries.

Our unique assessment methodology takes your management systems from compliance to performance, in order to reduce business risk, and enhance the effectiveness, efficiency, and continuous improvement of your management systems.

LRQA is part of the Lloyd's Register Group and at our heart sits a charity, the LR Foundation. Most organisations do something to make money but at Lloyd's Register, we make money to do something. As a percentage of our profits go towards the LR Foundation, every time you choose LRQA, not only are you getting best-in-class professional assurance services, but you are helping to make a difference to our world.

Through our extensive range of training and assessment services, LRQA is helping organisations worldwide transition to the new and revised ISO standards. We offer a range of assessment services as well public and in-house training courses, all aimed at helping to ensure that organisations worldwide have a smooth transition to the new standards.

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Paolo Zonaro  
Turboden Quality Assurance Engineer

Organisations worldwide have until September 2018 to transition to the new and revised ISO 9001:2015 quality management system standard.

The clock is ticking – where is your organisation in the transition process?

To find out more about LRQA's services, please visit [www.lrq.com](http://www.lrq.com) or contact us at [enquiries@lrqa.com](mailto:enquiries@lrqa.com)

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